

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-23. (canceled)

24. (previously presented) A method for the prevention or treatment of Alzheimer's disease (AD) in a subject having or suspected of having AD, comprising administering to said subject a therapeutically effective amount of a non-wild type protofibril, wherein said non-wild type protofibril comprises the A β 42-Arc peptide (SEQ ID NO:1).

25-26. (canceled)

27. (previously presented) A method for the prevention or treatment of Alzheimer's disease (AD) in a subject having or suspected of having AD, comprising administration to said subject a therapeutically effective antibody wherein said antibody is raised against a protofibril comprising an A β -Arc peptide.

28-31. (canceled)

32. (previously presented) The method according to claim 27, wherein said antibody is monoclonal.

33. (previously presented) The method according to claim 27, wherein said antibody is human or humanized.

34-38. (canceled)

39. (previously presented) A method for the prevention or treatment of Alzheimer's disease (AD) in a subject having or suspected of having AD, comprising administering to said subject a therapeutically effective amount of a non-wild type protofibril, wherein said protofibril comprises the peptide selected from the group consisting of A β 39-Arc (Amino Acids 1-39 of SEQ ID NO:1), A β 40-Arc (Amino Acids 1-40 of SEQ ID NO:1), A β 41-Arc (Amino Acids 1-41 of SEQ ID NO:1), A β 42-Arc (SEQ ID NO:1), and combinations thereof.

40. (previously presented) The method according to claim 39, wherein said protofibril is in combination with a mutation selected from the group consisting of the Dutch, Flemish, Italian, Iowa mutations, and combinations thereof.

41. (previously presented) A method for the prevention or treatment of Alzheimer's disease (AD) in a subject having or suspected of having AD, comprising administering to said subject a therapeutically effective amount of a non-wild type protofibril, wherein said protofibril comprises a mutated A β peptide comprising the mutation Glu₂₂ \rightarrow Gly₂₂.

42. (previously presented) The method according to claim 41, wherein said protofibril is in combination with a mutation selected from the group consisting of the Dutch, Flemish, Italian, Iowa mutations, and combinations thereof.

43. (previously presented) The method according to claim 27, wherein said A β -Arc peptide is selected from the group

consisting of A β 39-Arc (Amino Acids 1-39 of SEQ ID NO:1), A β 40-Arc (Amino Acids 1-40 of SEQ ID NO:1), A β 42-Arc (SEQ ID NO:1), and combinations thereof.

44. (previously presented) A method for the prevention or treatment of Alzheimer's disease (AD) in a subject having or suspected of having AD, comprising administration to said subject a therapeutically effective antibody, wherein said antibody is raised against a protofibril comprising an A β -Arc peptide selected from the group consisting of A β 39-Arc (Amino Acids 1-39 of SEQ ID NO:1), A β 40-Arc (Amino Acids 1-40 of SEQ ID NO:1), A β 41-Arc (Amino Acids 1-41 of SEQ ID NO:1), A β 42-Arc (SEQ ID NO:1), and combinations thereof.

45. (previously presented) The method according to claim 44, wherein said protofibril is in combination with a mutation selected from the group consisting of the Dutch, Flemish, Italian, Iowa mutations, and combinations thereof.

46. (new) The method according to claim 27, wherein said antibody is raised against a protofibril comprising an A β -Arc peptide and said A β -Arc peptide comprises a mutation Glu₂₂→Gly₂₂.

47. (new) The method according to claim 27, wherein said antibody is raised against a protofibril comprising an A β -Arc peptide and said A β -Arc peptide is selected from the group consisting of A β 39-Arc (Amino Acids 1-39 of SEQ ID NO:1),

A β 40-Arc (Amino Acids 1-40 of SEQ ID NO:1), and A β 42-Arc (SEQ ID NO:1).

48. (new) The method according to claim 27, wherein said antibody is raised against a protofibril comprising an A β -Arc peptide and said protofibril is in combination with a mutation selected from the group consisting of the Dutch, Flemish, Italian and Iowa mutations.